



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,717	08/17/2001	Matthias Huetsch	30014200-1013	6215
58328	7590	09/19/2006	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP FOR SUN MICROSYSTEMS P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			WU, QING YUAN	
			ART UNIT	PAPER NUMBER
			2194	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/932,717	Applicant(s) HUETSCH ET AL.	
	Examiner Qing-Yuan Wu	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (hereafter He) (U.S. Patent 6,671,259) in view of Zisapel et al (hereafter Zisapel) (U.S. Patent 6,249,801).

4. He and Zisapel were cited in the last office action.

5. As to claim 5, He teaches the invention substantially as claimed including a method in a data processing system having a first and a second load balancing server and having a plurality of processing servers, the method comprising the steps of:

receiving by the first load balancing server a request to perform a processing [col. 3, lines 55-56; 21, Fig. 2];

sending the request from the first load balancing server to the second load balancing server [col. 3, lines 44-49; 23, Fig. 2];

determining a load of each of the plurality of processing servers by the second load balancing server [col. 4, lines 5-12] and selecting by the second load balancing server a selected one of the plurality of processing servers that is suitable for performing the processing, wherein the selection is performed based on the load of each of the plurality of processing servers [col. 4, lines 41-46; 25, Fig. 2]; and

sending by the second load balancing server to the selected one of the plurality of processing servers an indication to perform the processing [col. 4, lines 1-4, 46-49].

6. He does not specifically teach sending an identifier of the selected one of a plurality of processing servers from the second load balancing server to the first load balancing server.

However, He disclosed a scenario where the function of the arrangement for communications between client and one of the servers depends on the load of the LB server. The LB server either allows the client system to directly contact a specific server or provides specific server information on a per session basis [col. 3, lines 49-54] and the communication link is establish and manage by the LB server [col. 7, lines 37-41; 251, Fig. 5; 271, Fig. 6]. In addition, He disclosed a LB server and LBS selector combination [col. 10, lines 33-67; Fig. 7].

7. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have modify He's LB selector (or LB server and LBS selector combination) which has the capability of establishing and routing a communication link between a selected server and a client by identifying the selected server and client to the LB selector, because doing so would dramatically decrease the load off the LB server.

8. Furthermore, He does not specifically teach assigning by the second load balancing server the first load balancing server to receive a request from a client to perform a processing. However, Zisapel teaches sending an HTTP redirect message from the first load balancer/server farm to the client instructing the client to reroute the request to the second load balancer/server farm indicated in the redirect message [Zisapel, col. 1, lines 49-53] and forwarding the request from a first load balancer to a second load balancer [Zisapel, col. 2, lines 20-39].

9. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of He with the teaching of Zisapel because the teaching of Zisapel can further enhance the teaching of He by providing a failover/offloading mechanism from an overloaded server farm to another server farm capable of handling the request [Zisapel, col. 1, lines 44-49].

10. As to claims 7-8, He as modified teaches the invention substantially as claimed including receiving a plurality of load metrics that originate from the plurality of processing servers at the second load balancing server and encoding the at least one load metric in the request [col. 4, lines 6-12].

11. As to claims 9-10, He as modified teaches the invention substantially as claimed including wherein the first load balancing server is a load balancing slave [15, Fig. 1], and wherein the second load balancing server is a load balancing master [17a, 17b, Fig. 1].

Art Unit: 2194

12. As to claims 14-17, these are data processing system claims that correspond to the method claims 5, 7, and 9-10. Therefore, they are rejected for the same reason as claims 5, 7, and 9-10 above.

13. As to claims 22, and 24-25, these are computer readable medium claims that correspond to the method claims 5, and 7-8. Therefore, they are rejected for the same reason as claims 5, and 7-8 above.

14. As to claim 1, this claim is rejected as claim 5 above.

15. As to claims 2 and 6, these claims are rejected for the same reason as claims 1 and 5 above.

16. As to claims 3-4, these claims are rejected for the same reason as claims 7-8 above.

17. As to claims 11-13, these are data processing system claims that correspond to the method claims 1, and 3-4. Therefore, they are rejected for the same reason as claims 1, and 3-4 above.

18. As to claims 18-21, these are computer readable medium claims that correspond to the method claims 1-4. Therefore, they are rejected for the same reason as claims 1-4 above.

19. As to claim 23, this is a computer readable medium claim that corresponds to the method claim 6. Therefore, it is rejected for the same reason as claim 6 above.

20. As to claim 26, this is a load balancer claim that corresponds to the method claim 1. Therefore, it is rejected for the same reason as claim 1 above.

Response to Arguments

21. Applicant's arguments filed 6/30/06 have been fully considered but they are not persuasive.

22. In the remarks, Applicant argued in substance that:

- a. *He's* load balancing selector LBS is not a load balancing server.
- b. *He's* load balancing selector LBS is not assigned by a second load balancing server to receive a request from a client.
- c. *Zisapel* failed to disclose or suggest a first load balancing server that sends a request to perform processing to a second load balancing server and receives back an identifier of a selected server to perform the process.
- d. *Zisapel's* first load balancing server does not send the request to the second load balancing server.

23. Examiner respectfully traversed Applicant's remarks:

24. As to point (a), *He* teaches a LB server and LBS combination [col. 10, lines 33-67; Fig. 7], given that *He*'s LB server satisfy applicant's (second) load balancing server, *He*'s LBS in integrated form (implemented within the LB server) clearly satisfy the limitation of a (first) load balancing server.

25. As to point (b), *Zisapel* teaches sending an HTTP redirect message from the first load balancer/server farm (master/second load balancing server) to the client instructing the client to reroute the request to the second load balancer/server farm (slave/first load balancing server) indicated in the redirect message [*Zisapel*, col. 1, lines 49-53] and forwarding the request from a first load balancer to a second load balancer [*Zisapel*, col. 2, lines 20-39], in combination the examiner believed the above limitation have been met. In addition, applicant cannot show nonobviousness by attacking the references individually where, as here, the rejection is based on a combination of references. See *In re Keller*, 208 USPQ 871 (CCPA 1981).

26. As to point (c), *He* teaches a first load balancing server that sends a request to perform processing to a second load balancing server [col. 3, lines 44-49; 23, Fig. 2]. In addition, *He* and *Zisapel* do not specifically teach sending an identifier of the selected one of a plurality of servers from the load balancing master (second load balancing server) to the load balancing slave (first load balancing server). However, *He* disclosed a scenario where the function of the arrangement for communications between client and one of the servers depends on the load of the LB server. The LB server either allows the client system to directly contact a specific server or provides

Art Unit: 2194

specific server information on a per session basis [col. 3, lines 49-54] and the communication link is establish and manage by the LB server [col. 7, lines 37-41; 251, Fig. 5; 271, Fig. 6]. In addition, *He* disclosed a LB server and LBS selector combination [col. 10, lines 33-67; Fig. 7]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that *He*'s LB selector (or LB server and LBS selector combination) has the capability of establishing and routing a communication link between a selected server and a client by identifying the selected server and client to the LB selector, and doing so would dramatically decrease the load off the LB server. Again, applicant cannot individually address the reference used to reject the claims, because the rejection is based on a combination of *He* and *Zisapel*.

27. As to point (d), this limitation was met by *He*. See point (c) above.

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

Art Unit: 2194

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-6:00pm Monday-Thursday and alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Qing-Yuan Wu

Examiner

Art Unit 2194


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER